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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,319	09/10/2004	James Vern Cunningham	14819NP	1943

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EXAMINER

MCDONALD, SHANTESE L

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

06/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/507,319

**Applicant(s)**

CUNNINGHAM ET AL.

**Examiner**

Shantese L. McDonald

**Art Unit**

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 10 September 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) 1, 2, 4, 9-14 and 18-25 is/are rejected.  
7) ☐ Claim(s) 3, 5-8, 15-17, 19 and 26-28 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 6/1/05  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ ~~Notice of Informal Patent Application~~  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to what is meant by, "having first and end opposing ends", in lines 3-4.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4,9-12 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiling in view of Syverson.

Reiling teaches a vacuum cleaner suction device for use in a cleaning apparatus comprising a casing, 20, defining a substantially cylindrical cavity, the casing having first and second opposing ends and a first axis, the first end having an intake and the second end having an exhaust, (col. 2 lines 28-48), a motor, 10, contained within the cavity, an impeller, 30, 36, wherein rotation of the impeller in a first direction causes air

to be drawn through the intake and expelled through the exhaust, (col. 3, line 72- col. 4, line 3). Reiling also teaches that the impeller is a plurality of sets of centrifugal fan blades, 30, 36, spaced equally about the rotor in an arc perpendicular to the first and second axes, the impeller being mounted between the rotor and the casing, (col. 2, lines 49-61, fig. 3), and the device being mounted to a wall, (col. 4 lines 51-64). Reiling teaches all the limitations of the claims except for the motor being a DC brushless motor having a stator mounted to a shaft and the motor having a substantially cylindrical rotor mounted for rotation about the shaft, the shaft having a second axis and the shaft being fixedly mounted within the casing with the first and second axes being aligned, the impeller fixedly mounted for rotation with the rotor, the rotor having an adaptor extending from one end and the adaptor having a reduced diameter from the remainder of the rotor, the impeller being a squirrel cage fan, the casing having a diameter less than the depth of a wall stud of a conventionally framed structure, the diameter being or 5 and 1/2 inches or less, and 3 and 1/2 inches or less, and the device being mounted within a wall cavity between wall studs of conventionally framed house. Syverson teaches a DC brushless motor having a stator, 122, mounted to a shaft, 82, and the motor having a substantially cylindrical rotor, 80, mounted for rotation about the shaft, the shaft having a second axis and the shaft being fixedly mounted within the casing with the first and second axes being aligned, the impeller fixedly mounted for rotation with the rotor, the rotor having an adaptor, 104, extending from one end and the adaptor having a reduced diameter from the remainder of the rotor, (fig. 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to

provide the tool of Reiling, with a motor, as taught by Syverson, as an alternative mode to power the suction device. It would have been further obvious to provide the tool of Reiling with the impeller being a squirrel cage fan, the casing having a diameter less than the depth of a wall stud of a conventionally framed structure, the diameter being or 5 and 1/2 inches or less, and 3 and 1/2 inches or less, and the device being mounted within a wall cavity between wall studs of conventionally framed house, as a matter of obvious design choice.

Claims 13,14,24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiling as modified by Syverson in further view of Stephens et al.

Reiling as modified by Syverson teaches all the limitations of the claims except for a filter being located between the intake and the air delivery apparatus and a particle receptacle between the filter and the air delivery system. Stephens et al. teaches a filter, 34, being located between the intake and the air delivery apparatus and a particle receptacle, 38, between the filter and the air delivery system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the tool of Reiling as modified by Syverson with a filter and particle receptacle, as taught by Stephens, in order to enhance the functionality of the tool.

***Allowable Subject Matter***

Claims 3,5-8,15-17,19 and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim was cited to show another example of a suction device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese L. McDonald whose telephone number is (571) 272-4486. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.L.M.  
June 22, 2008

/Joseph J. Hail, III/

Supervisory Patent Examiner, Art Unit 3723